UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,471	04/26/2001	Loren Christensen	33556	8113

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EXAMINER
CHANKONG, DOHM

ART UNIT	PAPER NUMBER
2152	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/843,471	CHRISTENSEN, LOREN
	Examiner	Art Unit	
	Dohm Chankong	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 November 2004*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 13-16* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 13-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1>   Applicant's amendment and remarks have been received and reviewed. Claims 9-12

were cancelled. Claims 1-8 and 13-16 are now presented for examination.

Response to Arguments

2>   Applicant's arguments filed 11.16.2004 have been fully considered but they are not

persuasive.

With respect to Applicant's arguments directed to claims 1, 2, 5, 6, 9 and 10, Applicant

seems to be arguing the advantages and benefits of the invention rather than the claimed

invention. For instance, in regards to the primary prior art reference [Sharon et al, U.S

Patent No. 6.205.122], Applicant argues that Sharon is deficient because it behaves in the

manner of centralized topology discovery and is incapable of "providing the level of

discovery information that Applicant's invention provides through the direct polling of all

network elements" [page 7 of Applicant's remarks]. These arguments and limitations are not

disclosed in the claimed invention. Instead, the claim merely claims a network discovery of

devices using at least one data collection node computer, creating a distributed database using

the information collected by the node computer(s) and importing the database to a server

computer. It should be noted that contrary to Applicant's assertion, Sharon clearly discloses

that the distributed agents are able to act independant of a central manager, with a final

report being sent to the central manager once; the use of the central manager is to provide a

central facility for providing the topology related information for easier access (column 6

«lines 39-49 and 59-67» and column 12 «lines 40-53»).

It should be clear that the responsibility of the Examiner is to determine the patentibility of the claims as they are written, and not for the possible advantages that they may provide. In thie respect, Sharon clearly discloses the claimed limitations of claim 1 as it is written.

For example, claim 1 discloses:

"distributing records of discovered network devices using a plurality of discovery engine instances located on at least one data collection node computer whereby a resulting distributed record compilation comprises a distributed network topology database." Sharon suggests these limitation with his agents which are distributed throughout a network used to discover distributed network devices [abstract | column 6 «lines 39-45» : agents analogous to data collection node computers]; exchanging information concerning network devices between the agents [column 6 «lines 39-45» : information analogous to records]; each agent having a database for storing information about the discovered network devices [claim 1(a).iv : analogous to distributed network topology database]; and finally, a manager element that receives information stored on the agents' database, the manager element enabled to monitor the performance of the agents and the network and manage the network [column 6 «lines 18-28 and 59-67» | column 12 «lines 40-53»]

With respect to Applicant's arguments directed to claims 4, 8 and 12, Applicant argues that the combination of Sharon and Sharon-2 behave in the manner of centralized information gathering of network topology. Again, this is merely one implementation of Sharon's disclosure. He also describes implementing the distributed agents in the manner described by Applicant, without the intervention of a central manager for controlling the

agents, and utilizing the central manager to receive the distributed database for network management (column 6 «lines 39-49 and 59-67»). The Sharon-2 reference is used as a teaching for implementing client computers as performance monitor clients.

In conclusion, Sharon is directed towards distributed agents, each agent responsible for the discovery of network elements in their network segments, each agent also capable of storing information related to the discovery of said network elements. Since the agents are distributed throughout the network and responsible for discovering their network segment, they are essentially performing localized discovery by polling the segment on which they are located. Sharon is clearly relevant to Applicant's invention.

Therefore, Examiner believes that Sharon and Sharon-2 clearly read on the limitations of the claims as they are written.

3>   Applicant's arguments, see page 7, filed 11.16.2004, with respect to the rejection(s) of claim(s) 3, 7 and 11 under 35 U.S.C § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly discovered prior art.

Claim Rejections - 35 USC § 102

4>   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by

another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5>   Claims 1, 2, 5, 6, 13 and 14 are rejected under 35 U.S.C 102(e) as being anticipated by Sharon et al, U.S Patent No. 6.205.122 ["Sharon"].

6>   As to claim 1, Sharon discloses a network topology discovery system, leveraging the functionality of a high-speed communication network [abstract], comprising the steps of:

distributing records of discovered network devices using a plurality of discovery engine instances located on at least one data collection node computer whereby the resulting distributed record compilation comprises a distributed network topology database [column 4, lines 20-50, column 6, lines 39-49, column 12, lines 40-53 and claim 1]; and

importing the distributed network topology database onto at least one performance monitor server computer so as to enable network management [column 12, lines 40-53, claim 1-(a.iv) and (b) where: central management engine is equivalent in functionality to the claimed PM server computer].

7>   As to claim 2, Sharon teaches the system of claim 1, wherein at least one discovery

engine instance is located on the data collection node computers on a ratio of one engine

instance to one central processing unit whereby the total number of engine instances is at

least two so as to enable the parallel processing of the distributed network topology database

[column 4, lines 22-30, column 8, lines 38-39 and column 12, lines 31-34].

8>   As to claim 5, Sharon discloses a network topology discovery system, leveraging the

functionality of a high-speed communication network [abstract], comprising:

        at least one data collection node computer connected to the network for discovering

network devices using a plurality of discovery engine instances whereby a distributed

network topology database is created [column 4, lines 20-50, column 12, lines 40-53 and claim

1]; and

        at least one performance monitor server computer having imported the distributed

network topology database whereby network management is enabled [claim 1-(a.iv) and (b)

where: central management engine is equivalent in functionality to the claimed PM server

computer].

9>   As to claim 6, Sharon teaches the system of claim 5, wherein at least one discovery

engine instance is located on the data collection node computers on a ratio of one engine

instance to one central processing unit whereby the total number of engine instances is at

least two so as to enable the parallel processing of the distributed network topology database

[column 4, lines 22-30, column 8, lines 38-39 and column 12, lines 31-34].

10>   As to claims 13 and 14, as they are merely claims to a product that implements the

steps of the method of claims 1 and 2, respectively, they do not teach or further define over

the claimed limitations. Therefore, claims 13 and 14 are rejected for the same reasons set forth

for claims 1 and 2, supra.

Claim Rejections - 35 USC § 103

11>   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
> are such that the subject matter as a whole would have been obvious at the time the invention was made to a
> person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

12>   Claims 3, 7 and 15 are rejected under 35 U.S.C 103(a) as being unpatentable over

Sharon in view of Crooks, U.S Patent Publication No. 2002/0055988 A1 [Crooks].

13>   As to claim 3, Sharon does not teach the system of claim 1, wherein a vendor specific

discovery subroutine is launched upon detection by the system of a non-MIB II standard

device so as to query the vendor's private MIB using a vendor specific algorithm.

14>   Crooks teaches a system wherein a vendor specific discovery subroutine is launched upon detection by the system of a non-MIB II standard device so as to query the vendor's private MIB using a vendor specific algorithm [0026, 0027 where: Crooks' discloses utilizing standard MIBs to recognize devices in addition to private MIBs for non-standard devices. Crooks also discloses obtaining the private MIBs resident on the device which is comparable to an algorithm]. One would have been motivated to incorporate Crooks' private MIB functionality into Sharon to allow manufacturers to implement their own information bases for recognizing their devices in the network.

15>   Claim 7 is similar in scope to claim 3 and therefore is rejected for the same reasons provided in above for claim 3.

16>   As to claim 15, as it is merely a claim to a product that implements the step of the method of claim 3, it does not teach or further define over the claimed limitations. Therefore, claim 15 is rejected for the same reasons set forth for claim 3.

17>   Claims 4, 8 and 16 are rejected under 35 U.S.C 103(a) as being unpatentable over Sharon in view of Sharon et al, U.S Patent No. 6,137,782 ["Sharon-2"].

18>   As to claim 4, Sharon does teach the system of claim 1 wherein at least one client computer is connected to the network so as to communicate remotely with the performance

monitor server computers [claim 1 where: the agents are equivalent to client computers], but does not disclose that the client computer is a performance monitor client computer.

19>   Sharon-2 discloses that distributed agents in a network can be used to monitor traffic [i.e. network performance] [abstract]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Sharon-2's performance monitor functionality into Sharon's client computers to allow for traffic analysis of a network topology [column 2, lines 50-55].

20>   Claim 8 is similar in scope to claim 4 and therefore is rejected for the same reasons provided in above for claim 4.

21>   As to claim 16, as it is merely a claim to a product that implements the step of the method of claim 4, it does not teach or further define over the claimed limitation. Therefore, claim 16 is rejected for the same reasons set forth for claim 4, supra.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (571)272-3942. The examiner can normally be reached on 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DC

Dung C. Dinh
Primary Examiner